

WHAT IS CLAIMED IS:

1. A dental bleaching agent set comprising; a first component for previously attaching to a tooth surface comprising an organic solvent containing at least one of a titanium oxide powder, a nitrogen doped titanium oxide powder, and a titanium oxinitride powder having photocatalytic activities, and a second component for contacting to the tooth surface comprising a compound that produces hydrogen peroxide in water, a thickener, and a carrier.
2. The dental bleaching agent set as claimed in Claim 1, wherein the content of at least one of the titanium oxide powder, the nitrogen doped titanium oxide powder, and the titanium oxinitride powder is 0.001 ~ 30 % by weight.
3. The dental bleaching agent set as claimed in Claim 1 or Claim 2, wherein the titanium oxinitride powder has a Ti-O-N structure containing nitrogen in its crystalline lattices, and exhibits photocatalytic activities in the visible spectral region.

4. The bleaching agent set as claimed in Claim 1, wherein the at least one of the titanium oxide powder, the titanium oxinitride powder, and the titanium oxinitride powder carries ceramics on the surface thereof in an island form, an acicular form, or a mesh form.
5. The bleaching agent set as claimed in Claim 3 or Claim 4, wherein at least one of the titanium oxide powder, the titanium oxinitride powder, and the titanium oxinitride powder carries a charge separation substance on the surface thereof.
6. The bleaching agent set as claimed in one of the Claim 1 to Claim 5, wherein the first component further contains one or more of a metal oxide, a metal salt, and a metal powder.
7. The bleaching agent set as claimed in Claim 6, wherein the content of one or more of the metal oxide, the metal salt, and the metal powder is 0.001 ~ 10 % by weight.
8. The bleaching agent set as claimed in one of the Claim 1 to Claim 7, wherein the first component

further contains 0.5 ~ 20 % by weight of a thickener.

9. The bleaching agent set as claimed in one of the Claim 1 to Claim 8, wherein the first component further contains water.
10. The bleaching agent set as claimed in one of the Claim 1 to Claim 9, wherein at least one of the first component and the second component has a pH value of 5.0 ~ 10.0.
11. The bleaching agent set as claimed in one of the Claim 1 to Claim 10, wherein the second component consists of 1 ~ 40 % by weight of the compound that produces hydrogen peroxide in water, 0.5 ~ 20 % by weight of the thickener, and the balance being the carrier.
12. A dental bleaching method comprising the steps of: attaching, to teeth surface, a first component comprising an organic solvent containing at least one of a titanium oxide powder, a nitrogen doped titanium oxide powder, and a titanium oxinitride powder having photocatalytic activities; and contacting, to the teeth surface, a second component comprising

a compound that produces hydrogen peroxide in water, a thickener, and a carrier; and irradiating light on the teeth surface.

13. A dental bleaching method comprising the steps of attaching a first component on teeth surface; contacting, to the teeth surface, a second component; and irradiating light on the teeth surface, the first component comprising an organic solvent containing 0.001 ~ 30 % by weight of at least one of a titanium oxide powder, a nitrogen doped titanium oxide powder, and a titanium oxinitride powder having photocatalytic activities, and 0.001 ~ 10 % by weight of one or more of a metal oxide, a metal salt and a metal powder, the second component comprising 1 ~ 40 % by weight of a compound that produces hydrogen peroxide in water, 0.5 ~ 20 % by weight of a thickener, and a carrier.